

Chemical Weapons Improved Response Program





Guidelines for Mass Casualty Decontamination During a Terrorist Chemical Agent Incident

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Study Objectives

- Identify technical and operational issues associated with mass casualty decontamination after a terrorist incident involving chemical agents
- Recommend the best approaches for responders to use in the event of a large-scale terrorism incident involving chemical agents

Decontamination Needs

- Remove agent from victim's skin and clothing to stop increasing severity of chemical exposure
- Protect first responders and medical personnel from contamination and chemical effects
- Provide victims with aid as fast as possible, at or near the incident site
- Prevent the spread of contamination throughout emergency facilities

Decontamination Materials

Recommended:

- Water alone: flush or shower with high-volume low-pressure water for physical removal of CWA

Not Recommended:

- Soap solution: marginal improvements over water alone for less soluble agents are offset by delays in decon preparation
- Bleach solution: research indicates bleach exacerbates effects of chemical agents on skin

Water for People - Bleach for Things

Decontamination Prioritization

Analogous to medical triage:

**Provide the greatest benefit
to the greatest number of people**

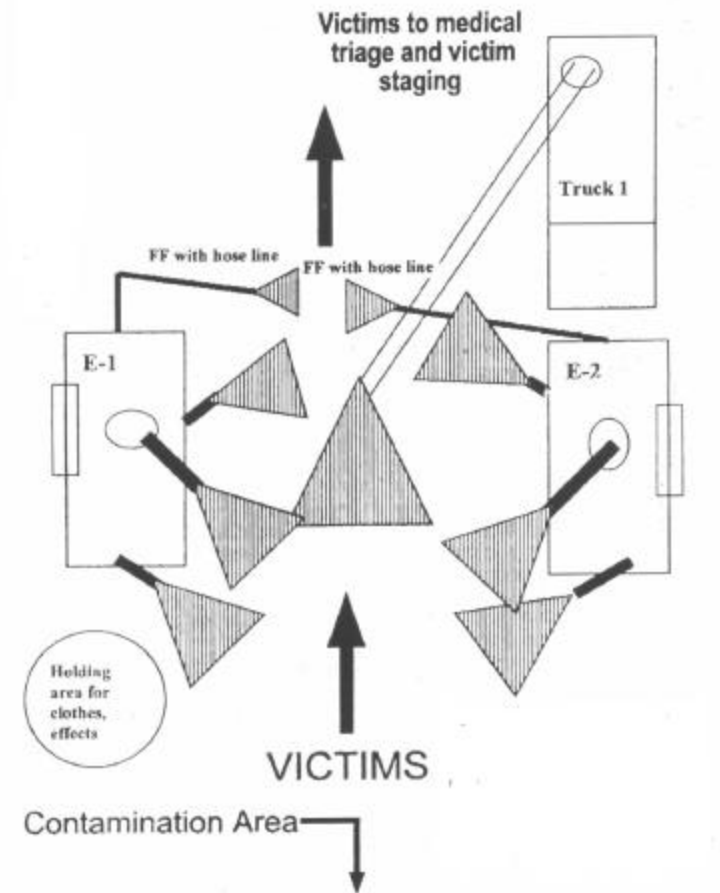
- Casualties exhibiting severe symptoms of chemical agents
- Casualties with apparent liquid contamination on clothing or skin
- Casualties who believe they were contaminated

Fire Equipment Procedures



**The Ladder Pipe Decontamination System
Howard County, MD Fire Department**

Fire Equipment Procedures



**The Ladder Pipe Decontamination System
Baltimore County, MD Fire Department**

Fire Equipment Procedures



**The Emergency Decontamination Privacy Corridor System
Montgomery County, MD Fire & Rescue Service**

Principles

- ρ Expect a 5:1 ratio of unaffected:affected casualties
- ρ Decontaminate ASAP
- ρ Disrobing is decontamination; top to bottom, more the better
- ρ Water flushing generally is the best mass decon method
- ρ After known exposure to liquid agent, first responders must self-decontaminate as soon as possible to avoid serious effects

Further CW IRP Information

Further details are available in “Guidelines for Mass Casualty Decontamination During a Terrorist Chemical Agent Incident”.

A report available over the internet, under CWIRP, at the web site:

<http://www2.sbccom.army.mil/hld/index.htm>

